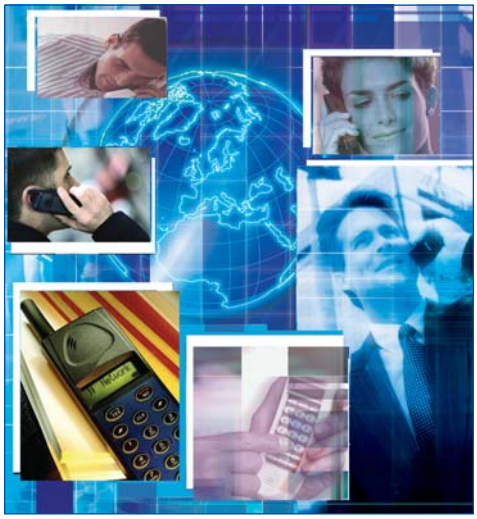
Drug Intelligence Brief

DRUG ENFORCEMENT ADMINISTRATION
INTELLIGENCE DIVISION

June 2003
DEA-03035

AREA CODES FREQUENTLY ASKED QUESTIONS

The demand for telephone numbers has increased dramatically with the growth of wireless telephones; fax and pager use; pay-at-the-pump gas stations; automatic teller machines; and the use of additional lines for Internet access—which all use telephone numbers. Below are frequently asked questions (FAQs) about area codes.



Who is in charge of area codes?

- Congress gave the Federal Communications Commission (FCC) jurisdiction over telephone number administration in 1996.

- The FCC selected NeuStar Incorporated, a neutral third party company, to be the administrator of the North American Numbering Plan. The North American Numbering Plan Administration (NANPA) oversees the assignment of area codes; three-digit central office codes; carrier identification codes; and other numbering resources throughout the United States, Canada, Bermuda, and 16 Caribbean countries.

- New area codes may be added either by a geographic split or by an overlay. (See answer below for the difference between a geographic split and an overlay).

What is the difference between a Geographic Split and an Overlay?

Geographic Split

Some area codes are added by way of a geographic split. The geographic area covered by an existing area code is split into two or more smaller areas. One of the sections retains the existing area code, while others receive new area code(s). The benefit of a geographic split is that an area code remains defined as a geographic area—customers know something about the location of the people they are calling. One downside of a geographic split is that many customers must cope with the inconvenience of changing their area code. Another downside is that, as area codes continue to exhaust, smaller and smaller areas must be created; some customers' area codes will change multiple times; and, oftentimes, communities must be split among multiple area codes.

Overlay

As the name suggests, the new area code "overlays" the pre-existing area code, most often serving the identical geographic area. The benefit of an overlay is that customers retain their existing area codes. Only new lines get the new area code. An overlay requires all customers, including those with telephone numbers in the pre-existing area code, to dial area codes for all calls, local and long distance. There is also a possibility that neighbors, or even telephone lines in the same house, could have different area codes.

What happens if an area code is designated for a change?

If an area is designated for a geographic split or an overlay, a date for "permissive dialing" and a date for "mandatory dialing" will be imposed. During the permissive dialing period for a split, customers will be able to reach a telephone number by dialing either the old or new area code. After the mandatory dialing date, only the new area code will work. During the permissive dialing period for an overlay, other customers in the local calling area can be reached by dialing 7 or 10 digits. After the mandatory date, 10-digit dialing is required, i.e., new area code plus seven-digit number.

How many numbers are available in each area code?

Each area code has a finite number of seven-digit telephone number combinations. Theoretically, each area code would include 10 million seven-digit telephone numbers. But some numbers are not available, such as seven-digit numbers starting with either a "0," a "1," or "9-11." Therefore, each area code has somewhat fewer than 8 million usable numbers.

How many area codes are available?

There are a total of 680 usable area codes available for assignment. Of that number, 317 are currently in service in the United States, Canada, and a number of Caribbean nations. By comparison, there were 119 area codes in service in the United States at the end of 1991. Current NANPA projections show the area codes available could exhaust within the next 10 to 15 years.

What is Number Pooling?

Number Pooling is a technology that allows telephone companies to share a prefix within a rate center. Companies can receive telephone numbers in blocks of 1,000 numbers, instead of blocks of 10,000 telephone numbers.

For instance, without Number Pooling, the telephone company would receive a block of 10,000 numbers that run from (202) 307-0000 to 307-9999. With Number Pooling, the carrier would get a block of 1,000 telephone numbers from (202) 307-4000 to 307-4999. The FCC controls Number Pooling availability.

What is Local Number Portability?

Local Number Portability (LNP) is the ability to port, or carry, your telephone number from your current local telephone carrier to another local carrier in your exchange. For example, if you decide you want to use a different telephone company to provide you with local telephone service for your home or business, you likely would want to continue to use your current telephone number. Therefore, you would want to port your telephone number to your new local telephone company. LNP allows you to do this.

Without LNP, customers must change telephone numbers when selecting other local telephone service providers. Most customers are reluctant to give up their existing numbers. Therefore, LNP is viewed as an important ingredient to competition for local telephone service.

What is Location Portability?

In the future, telephone companies may be able to provide customers with a geographic portability. Known as "Location Portability," customers may keep their same telephone numbers with them when they change their location from city to city, or state to state.

However, geographic portability is still in the planning stages and the development of industry standards for this type of portability has not yet been established. This type of technology will have a much more global impact for law enforcement. Once Location Portability is implemented, it will be difficult for anyone to determine where a call originates.

This report was prepared by the Data Management Section of the Office of Special Intelligence. This report reflects information received prior to May 2003. Comments and requests for copies are welcome and may be faxed to the Intelligence Production Unit, Intelligence Division, DEA Headquarters, at (202) 307-8726.